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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
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Implementation of the Local Competition Provisions of the Telecommunications Act of 1996	)	**CC Docket No. 96-98**
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WORLDCOM COMMENTS

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I. Introduction and Summary

Regardless of the service that they seek to offer, telecommunications carriers require a circuit from their network to their end user customers' premises. Such circuits are the fundamental input both for unswitched services – private line services and dedicated access services – and for services that include a switching function – local exchange services and associated switched access, switched interexchange service, frame relay, asynchronous transfer mode (ATM), and a host of other telecommunications services. And these telecommunications services are, in many cases, fundamental inputs for Internet access and other information services.

Only the incumbent local exchange carriers (ILECs) can self-provision circuits to end user customer premises on a ubiquitous basis. With their vast local networks, constructed during the decades in which they were government-sanctioned and protected monopolies, the ILECs can self-provision circuits to all customer locations in the nation.

By contrast, competitive local exchange carriers (CLECs)[1] *in the aggregate* can self-provision circuits to no more than a few tens of thousands of buildings.

Because their networks are so limited in scope, CLECs seeking to offer services on a ubiquitous basis have been using tariffed ILEC special access services to connect to their end user customers. ILEC special access services provide a basic unswitched circuit of whatever distance is required to reach an end user customer's premises, and therefore can be used as an input to many of the services that a CLEC might seek to offer (although the inflated cost of the ILEC special access input suppresses demand for the CLEC's service). CLECs are using LEC special access services to offer competitive special access services, local exchange services and associated switched access services, interexchange services, frame relay services, ATM services, and a range of other innovative services.

The fact that CLECs continue to use ILEC special access services as an input to their service offerings is perhaps the clearest evidence of the many roadblocks that the ILECs have erected to prevent full implementation of the Telecommunications Act of 1996 (1996 Act). Section 251(c)(3) of the Act grants *any* telecommunications carrier the right to "fill out" its network with unbundled network elements (UNEs) obtained at rates, terms, and conditions consistent with the requirements of section 251 and 252, including the Section 252(d)(1)(A)(i) pricing standard. In passing the 1996 Act, Congress certainly did not envision that CLECs would be forced to rely upon ILEC

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[1]By CLEC, WorldCom refers to all requesting carriers, including those that have traditionally focused on offering interexchange services.

interstate special access services rather than UNEs to offer telecommunications services wherever their own networks could not reach.

Five years after the adoption of the 1996 Act, the time has come for the Commission finally to give effect to the Act's unbundling provisions, and end the state of affairs in which CLECs are forced to use ILEC special access services to connect to end user customers wherever the CLECs' own networks cannot reach. The Commission should ensure that, consistent with the design of the 1996 Act, CLECs are able to use unbundled elements to connect to end users whenever they would be impaired without access to ILEC facilities. If a CLEC has been forced to serve a customer using a special access circuit, it should be permitted to convert that circuit to whatever element – a loop or enhanced extended link (EEL) – is required to reach that customer's location. Similarly, if a CLEC wins a new customer, it should be permitted to obtain the unbundled loop or EEL that is required to reach that customer's location.

There is no statutory basis for restricting the services that CLECs may offer to their customers using EELs or any other network element. As the Commission found in the *Local Competition Order*, Section 251(c)(3) "permits interexchange carriers and all other requesting carriers to purchase unbundled elements for the purpose of offering exchange services, or for the purpose of providing exchange access services to themselves in order to provide interexchange services to consumers."[2] And, contrary to the ILECs' claims, Section 251(d)(2) does not authorize the Commission to override the

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[2] Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *First Report and Order*, CC Docket No. 96-98, released August 8, 1996, at ¶ 356 (*Local Competition Order*).

plain language of Section 251(c)(3).

Even if Section 251(d)(2) authorized the Commission to conduct a service-specific impairment analysis with respect to EELs, there is simply no merit to the ILECs' suggestion that CLECs are not impaired without access to EELs if they are seeking to offer a service other than basic local exchange service. If a CLEC needs to rely on an ILEC facility to connect a customer to its network, it is impaired regardless of the services that it seeks to offer over that facility. Considering impairment on a service-by-service basis is a fundamentally irrational exercise that will yield no relevant information.

If the Commission restricts access to EELs in the manner urged by the ILECs, CLECs that are seeking to offer services other than basic local exchange service would have to build out their transport networks to over twenty thousand ILEC central offices in order to connect to unbundled loops. But the Commission has already determined in the *UNE Remand Order* that replicating the incumbent's vast and ubiquitous transport network would be "prohibitively expensive."[3] EELs are pro-competitive because they permit CLECs to offer services on a ubiquitous basis without having to make prohibitively expensive and economically inefficient investments in transport facilities to (and collocation facilities at) thousands of lower-density central offices.

Limiting access to EELs to those carriers that are seeking to provide basic local

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[3] Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, CC Docket No. 96-98, released November 5, 1999, at ¶ 355 (*UNE Remand Order*).

exchange service would be wholly contrary to the fundamental goals of the Act. First, such a use restriction would slow or stop altogether the development of broad-based competition for special access services, contrary to the Act's goal of promoting competition in the local exchange and exchange access markets. Second, a use restriction would suppress innovation by forcing CLECs that seek to offer ATM, frame relay, and other new services to use above-cost ILEC special access services to connect to their customers, contrary to the Act's goal of promoting innovation.

Finally, it is past time for the Commission to eliminate the prohibition on co-mingling. It is clear that the ILECs will use co-mingling restrictions to drive up their competitors' costs. As WorldCom's petition for waiver of the *Supplemental Order Clarification*[4] conclusively demonstrated, the co-mingling prohibition serves no legitimate public policy goal. The Commission has had sufficient time to recognize that co-mingling will promote CLEC network efficiencies and is thus in the public interest. The co-mingling prohibition should be lifted on an expedited basis, even apart from the Commission's consideration of the other issues raised in this proceeding.

II. Any Service-Specific Impairment Analysis Applied to EELs is Unlawful

In adopting the *Supplemental Order Clarification's* existing use restriction, the Commission has committed serious legal errors. As an initial matter, the application of the impairment analysis to a combination of elements is unlawful. On its face, section

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[4]Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *Supplemental Order Clarification*, CC Docket No. 96-98, released June 2, 2000 (*Supplemental Order Clarification).*

251(d)(2) applies only to individual network elements. Unless the Commission revisits the decision not to identify the EEL as a network element, there can be no impairment analysis unique to EELs. More importantly, as the Commission had previously and correctly found, any service-specific impairment analysis collides head-on with the plain language of section 251(c)(3), which empowers CLECs to use UNEs to provide any and all telecommunications services. If section 251(d)(2) could be read to contemplate service-by-service impairment analyses, then the Commission would be obligated to perform those analyses for every element and every service that a CLEC might conceivably offer. The immense impracticality of such an exercise strongly suggests that Congress did not intend the awkward construction of the Act proposed in the *Supplemental Order Clarification.*

A. The Commission cannot conduct an impairment analysis specific to EELs unless the EEL is first designated as a network element

In both the *Public Notice* and the *Supplemental Order Clarification*, the Commission has suggested that it may examine "whether or not carriers are impaired for special access service without access to *combinations* of unbundled network elements." Public Notice DA 01-169 (rel. Jan. 24, 2001) (emphasis added). But the Commission's suggestion that it may conduct a special impairment analysis for loop-transport combinations is in conflict with the Commission's decision in the *UNE Remand Order* not to identify such elements, i.e., the EEL, as a network element.

In making the determination of which elements should be made available to requesting carriers, Section 251(d)(2)(B) requires the Commission to assess whether "the

failure to provide access to such *network elements* would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to provide." 47 U.S.C. §251(d)(2)(B) (emphasis added). Under the plain language of this section, therefore, the Commission may assess impairment only for "network elements," and not separately for combinations of those elements. Consequently, the Commission may not engage in any EEL-specific impairment analysis without first revisiting its decision not to define the EEL as a network element.

Under the Commission's current rules, ILECs must provide requesting carriers with unbundled access to loops that are connected to dedicated transport in all cases in which both the loop and the transport element have been unbundled. The Commission's rules prohibit ILECs from separating network elements that are currently combined. 47 C.F.R. § 315(b). The Commission based this rule on the language in section 251(c)(3) of the Act. This interpretation has been upheld by the Supreme Court. In the *UNE Remand Order*, the Commission noted that "[t]o the extent an unbundled loop is in fact connected to unbundled dedicated transport, the statute and our rule 51.315(b) require the incumbent to provide such elements to requesting carriers in combined form."[5] As long as the obligation to provide EELs is grounded in Section 251(c)(3), not section 251(d)(2), there can be no EEL-specific impairment analysis.

[5] *UNE Remand Order* at ¶ 480.

B. It is unlawful for the Commission to conduct a service-specific impairment analysis in order to impose use restrictions on UNEs

Not only does the Commission's claim that it may conduct a separate impairment analysis for a loop-transport combination conflict with the plain language of Section 251(d)(2), but Section 251(d)(2) cannot be read as authorizing service-by-service impairment analyses.

Section 251(c)(3) of the Act requires ILECs to provide "to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements." 47 U.S.C. § 251(c)(3). In the *Local Competition Order*, the Commission concluded that this section "permits interexchange carriers and all other requesting [telecommunications] carriers to purchase unbundled elements for the purpose of offering exchange access services, or for the purpose of providing exchange access services to themselves in order to provide interexchange services to consumers."[6] The Commission stressed that this interpretation was "compelled by the plain language of the 1996 Act."[7] Despite this compulsion, in the *Supplemental Order Clarification* the Commission allowed the ILECs to impose a use restriction on loop-transport combinations based on an obvious misconstruction of Section 251(d)(2) of the Act and of the role it plays in the statute.

In section 251(d)(2), Congress required the Commission to "determine what network elements should be made available for purposes of subsection (c)(3)." 47

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[6] *Local Competition Order* at ¶ 356.

[7] *Id.*

U.S.C. § 251(d)(2). Thus, section 251(d)(2) authorizes the Commission to identify the particular network elements that ILECs must provide. ILECs must then provide those elements to requesting carriers pursuant to the standards established by Congress in section 251(c)(3). Once the Commission has determined that a particular network element must be made available on an unbundled basis pursuant to Section 251(d)(2), an ILEC must provide that element to any requesting telecommunications carrier that seeks to provide "a telecommunications service" using that element. The Commission previously found that the plain language of the Act compels this result. The Commission may not issue "legislative rules" interpreting section 251(d)(2) in a manner that overrides the plain language of section 251(c)(3). This is particularly true in this case. Section 251(c)(3) already imposes restrictions on UNEs. UNEs may be used by telecommunications carriers to provide telecommunications services. Surely if Congress intended to allow the Commission to vary these restrictions in any way, authority to do so would be granted in the same section, not in a different section.

This two-step approach to unbundling, in which the Commission identifies the elements that must be unbundled and the ILECs grant access to those elements for all services, is the only approach that is consistent with a fundamental regulatory departure that Congress incorporated into the 1996 Act – namely, shifting the focus of the regulatory framework from services to functional network elements. Congress recognized that each element is an input into the production of a multitude of services – and indeed that (given basic network engineering principles) carriers can use each element more efficiently as an input into the provision of multiple services than if a

separate set of elements must be used to offer each separate service -- and therefore focused regulatory attention on network elements.

Based on this new statutory focus on elements, the Commission correctly developed a costing methodology – total *element* long run incremental cost (TELRIC) – that yielded a single nondiscriminatory cost and price no matter how the element was used. TELRIC represented a modification to the total *service* long run incremental cost (TSLRIC) methodology widely used by ILECs because the FCC determined that the Act – and its sound implementation – required the focus to be on elements, not services.

The impairment determination must, similarly, focus on the availability of alternatives to unbundled ILEC functional network elements. If WorldCom or any other carrier requires the use of ILEC loop and transport facilities to gain connectivity to a particular end user location, such facilities are required regardless of the service to be offered. It is absurd to think that a CLEC might need an ILEC-provided EEL to reach an end user requesting local dial tone, but might somehow be able to find an alternative if the customer changed her mind and instead requested in-bound toll free service.

C. Assuming *arguendo* that section 251(d)(2) contemplates a service-by-service impairment analysis, the Commission has no discretion to decline to perform that analysis for all elements and all services

In the *Supplemental Order Clarification*, the Commission asserted that "[c]ontrary to the views of some commenters, section 251(d)(2) does not compel us, once we determine that any network element meets the 'impair' standard for one market, to grant competitors automatic access to that same network element solely or primarily

for use in a different market."[8] If this analysis is correct, it would have equal application for all applications of Section 251(d)(2). On that view, the Act would obligate the Commission to undertake for *all* network elements an impairment analysis for *every* service that a requesting carrier might seek to offer. The sheer impracticality of such an inquiry strongly suggests that the *Supplemental Order Clarification* is wrong and that the Act requires no such undertaking.

In pertinent part, section 251(d)(2) says:

> In determining what network elements should be made available for purposes of subsection (c)3, the Commission *shall* consider, at a minimum, whether— . . . the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer. (Emphasis added.) 47 U.S.C. § 251(d)(2).

According to the *Supplemental Order Clarification*: "[a]lthough ambiguous, that language is reasonably construed to mean that we *may* consider the markets in which a competitor seeks to offer services."[9] (Emphasis added.) In fact, there is no reasonable construction of the language that would give the Commission any discretion to eschew whatever "impairment" inquiry is required. By using "shall" and not "may," Congress deprived the Commission of discretion. Whatever impairment inquiry section 251(d)(2) requires, the Commission would have to undertake that inquiry in every instance.

Thus, if the Commission is correct that 251(d)(2) contemplates a service-by-service impairment analysis, then the Commission would be obligated to undertake that

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[8] *Supplemental Order Clarification* at ¶ 15.

[9] *Id.*

analysis for each service that CLEC might seek to offer. The Commission's rules would approximate a matrix with a list of elements on one side plotted against a list of services on the other. There are at least seven distinct network elements, plus sub-elements. Competitors may seek to offer an almost unlimited set of services using each of these elements. Not only are there broad classes of service such as local exchange and associated switched access, 1+ long distance, dial-around long distance, toll free, virtual private networks, dedicated Internet, dial-up Internet, private line, wide area networks, international, ATM and frame relay, but within each service class there are many distinct service offerings. Among other things, a CLEC may seek to offer distinct consumer, business, and government services, or to offer a particular type of service at different levels of capacity. Accordingly, if the Commission is correct that section 251(d)(2) contemplates service-by-service impairment analysis, then the Commission would have to separately assess impairment for a virtually unlimited number of service/element combinations.

The impracticality of such an inquiry would be further complicated by the need to adopt compliance monitoring rules to detect "cheating" by competitors who might order an element for which impairment was found for one service, and then use that element to provide a different service. Thus, under the view expressed in the *Supplemental Order Clarification*, section 251(d)(2) would require the establishment of a massive regulatory structure for evaluating and monitoring the use of UNEs. The sheer impracticality of this enterprise makes it quite unlikely that Congress intended for the Commission undertake it.

III. CLECs are Impaired with Respect to All Services

The Commission already has performed an impairment analysis for both loops and transport, and has determined that ILECs should be required to unbundle both of these elements nationwide.[10] The ILECs now argue that the Commission should revisit these impairment determinations in advance of the Commission's scheduled triennial review, and should do so by conducting a service-specific impairment analysis for special access services.

Not only is it inappropriate for the Commission to revisit the *UNE Remand Order*'s determinations at this time, given that these determinations were based on a thorough analysis of a comprehensive record, but, as discussed above, it would be both unlawful and unwise for the Commission to make impairment determinations on a service-by-service basis. If the Commission were nonetheless to undertake a service-specific impairment analysis, it would be obligated to do so for each of the services that a CLEC might seek to offer using loops, transport, and EELs – not just special access services.[11] And the Commission would be obligated to conduct a separate service-specific impairment analysis for each of the many types of special access services that a CLEC might seek to offer, including voice grade, DS-0, DS-1, DS-3, audio/video, and SONET services.

For each of the services that a CLEC might seek to offer, the Commission would

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[10] *UNE Remand Order* at ¶¶ 181, 332.

[11] As discussed above, one of the consequences of the Commission's proposed interpretation of Section 251(d)(2) is that it would be required to conduct an impairment analysis for each service that a CLEC might seek to offer.

then be required to examine all of the factors identified in the *UNE Remand Order* – costs (including fixed and sunk costs and economies of scale and scope), timeliness, quality, ubiquity, and operational factors. Because telecommunications economics are so sensitive to route-specific (and therefore end user-specific) factors, the Commission cannot presume, based on one CLEC's ability to offer the service in question to certain end users, that CLECs seeking to offer the service in question are not impaired. Rather, the relevant analysis must address what types of alternatives to ILEC loops and transport are available to a CLEC seeking to offer the service in question, where such alternatives are available, and whether they can actually be utilized in an efficient manner.[12]

If the Commission were to conduct such service-by-service impairment analyses for loops, transport and EELs, it would find that CLECs are impaired without access to these elements for *all* services that they might seek to offer. The alternatives to ILEC loops, transport, and EELs that are available as a "practical, economic, and operational matter" are far too limited in scope to enable a CLEC to reach the end user customers for any of the services that a CLEC might contemplate offering.

Certainly, any CLEC seeking to provide competitive special access services would be impaired without access to loops, transport, and EELs. With few exceptions, CLECs cannot self-provision or obtain from third parties the circuits that they need to

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[12] Among other things, the Commission's analysis also should ascertain the marketplace impact of potential alternatives to the ILEC by comparing the prices the ILECs charge for their elements when they sell them as services (as opposed to UNEs) to the TELRIC rates for the elements. The degree to which marketplace alternatives have pushed ILEC retail rates toward cost would provide important marketplace evidence concerning whether requesting carriers have alternatives that are available as a "practical, economic, and operational matter."

reach end users of special access services.

Loops

In the *UNE Remand Order*, the Commission declined to carve out exceptions to its loop unbundling policy for any type of loop facility, even for DS-1 and higher loops in Zones 1 and 2.[13] Given that the universe of actual and potential end users of special access services is far broader in scope than even the carve-outs rejected by the Commission in the *UNE Remand Order*,[14] it is clear that the Commission would have no reasoned basis to now find that CLECs seeking to offer a special access service are not impaired without access to unbundled loops.

Moreover, any special access-specific impairment analysis must recognize that CLECs seeking to offer a special access service face the same challenges in self-provisioning loops that are faced by a CLEC seeking to offer any other service, and which were enumerated in detail in the *UNE Remand Order*. These challenges include not only the expense and time required to construct loop plant, but rights-of-way disputes and difficulties in obtaining access to buildings.[15] Given that CLECs could potentially seek to offer special access services to any end user in the nation, and that the Commission has determined that replicating the incumbent's vast and ubiquitous loop

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[13] *UNE Remand Order* at ¶¶ 184-187.

[14] Special access services include not only DS-1 and higher, but also voice grade, DS-0, and other lower-bandwidth services. And special access services are purchased by customers throughout the nation, not just in Zones 1 and 2.

[15] *UNE Remand Order* at ¶¶ 182-187.

plant would be "prohibitively expensive and delay competitive entry,"[16] the Commission must find that CLECs seeking to provide competitive special access services are impaired without access to unbundled loops.

While CLECs that seek to offer SONET-rate special access services have, in certain instances, been able to self-provision loop facilities, this "suggests . . . only that carriers are unimpaired in their ability to serve these particular customers."[17] It says nothing, for example, about the ability of CLECs to self-provision loops to other end users of SONET special access services. And it says nothing about the ability of CLECs to self-provision loops to end users of lower-bandwidth special access services, such as DS-1 or DS-0 special access services.

The vast majority of end user locations that currently obtain special access service have too little traffic density for self-provisioning of loops to be economically viable. Data provided by U S West with its 1998 forbearance petition for Phoenix showed that, of the 3101 end user locations in the Phoenix Metropolitan Statistical Area (MSA) with "high speed" service (DS1 and above), over half – or 1634 locations – were served by only a single DS1 (and no DS3 or higher services).[18] Few locations in the

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[16] *UNE Remand Order* at ¶ 182.

[17] *Id.*

[18] Petition of U S West Communications, Inc. for Forbearance from Dominant Carrier Regulation in the Phoenix, Arizona MSA, CC Docket No. 98-157, August 24, 1998, Attachment B, Appendix D.

Phoenix MSA were served by more than a handful of DS1s.[19] And there would also be many locations in the Phoenix MSA served only by sub-DS1 services such as voice grade, DDS or DS-0 services.

Analysis of network infrastructure data for CLECs that offer special access services confirms that few end user locations have sufficient traffic density for CLECs to viably self-provision loop facilities. For example, XO Communications has reported that it serves only 3.6 percent of its end users' buildings over its own facilities.[20] In almost all cases, the small number of special access end user locations that CLECs serve over their own facilities are those that obtain the very-highest bandwidth special access services.

Transport

Given that CLECs that seek to offer competitive special access services are impaired without access to unbundled loops, such CLECs must obtain transport to ILEC end offices in order to obtain access to the unbundled loops. In the *UNE Remand Order*, the Commission declined to carve out any exceptions to its transport unbundling rule, even for entrance facilities or for wire centers serving more than 40,000 lines. Given that the existing and potential universe of ILEC central offices that serve end users of special access services is far broader in scope than even the narrow carve-outs rejected by the Commission in the *UNE Remand Order*, the Commission would have no

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[19]*Id.* Over 90 percent of locations – 2815 – obtained fewer than 10 DS1s and no DS3 or higher services.

[20]XO Communications Inc., SEC Form 10-K, at 37 (as of December 31, 2000, XO connected to 1,947 "on-net" buildings and 51,345 "off-net" buildings).

reasoned basis to now find that CLECs seeking to provide special access services are not impaired without access to unbundled transport.

Moreover, a CLEC seeking to provide a special access service faces the same challenges in self-provisioning transport that are faced by CLECs seeking to offer any other service, and which were enumerated in detail in the *UNE Remand Order*. These challenges include not only the cost of the fiber, rights-of-way, and trenching, but also the cost of collocating in ILEC central offices.[21] Given that CLECs could potentially seek to offer special access services to end users in any wire center in the nation, and that the Commission has determined that replicating the incumbent's vast and ubiquitous local transport network would be "prohibitively expensive,"[22] the Commission must find that CLECs seeking to provide competitive special access services would be impaired without access to unbundled transport.

While demand for special access services is somewhat concentrated, it is hardly limited to a handful of wire centers – and the scope of demand for transport for special access services could expand if residential and small and medium business customers begin to subscribe to advanced services.[23] Even today, WorldCom provides service to end users over ILEC special access services in virtually all wire centers in virtually all

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[21] *UNE Remand Order* at ¶¶ 355-357.

[22] *UNE Remand Order* at ¶ 355.

[23] The Commission has treated ADSL and other advanced services as special access services. GTE Telephone Operating Companies, GTOC Tariff FCC No. 1, GTOC Transmittal No. 1148, *Memorandum Opinion and Order*, 13 FCC Rcd 22466, 22479 (1998).

cities. For example, in the Los Angeles Metropolitan Statistical Area (MSA), WorldCom is purchasing Pacific Bell DS1 special access circuits – the most common type of special access circuit – in 105 of the MSA's 109 Pacific Bell wire centers. For a CLEC to self-provision transport for even 95 percent of the DS1 special access circuits that WorldCom currently obtains from Pacific Bell in the Los Angeles MSA, the CLEC would have to build its own transport facilities to fully 74 of these 109 wire centers. Moreover, to achieve 95 percent coverage of WorldCom's DS1 *end users*, rather than 95 percent of *circuits*, CLECs would have to build transport to an even larger number of offices. To put matters in perspective, CLECs *in the aggregate* have built transport to only 24 wire centers in the Los Angeles MSA[24] – even after multi-billion dollar investments over the past decade.

Even those offices with CLEC transport do not necessarily have a "practical, economic, and operational" alternative to ILEC facilities. Third-party transport may not be a viable alternative because it may require a CLEC to incur the additional expense of inefficient routing,[25] or may require a CLEC to overcome operational hurdles of coordinating "patchwork" transport from several third-party suppliers.[26] Aggregate data

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[24] Letter from Jeffry A. Brueggeman, Senior Counsel, SBC, to Ms. Magalie R. Salas, Secretary, FCC, March 6, 2001, Ameritech Operating Companies, Pacific Bell Telephone Company and Southwestern Bell Telephone Company Petitions for Pricing Flexibility, CCB/CPD File Nos. 00-26, 00-23, and 00-25, Appendix C, page 6 of 7.

[25] *UNE Remand Order* at ¶ 343. If third-party suppliers serve only office A, but a CLEC requires transport to offices A and B, the transport mileage may be lower if the CLEC obtains ILEC transport to office A and then from A to B, rather than separately obtaining CLEC transport to office A and ILEC transport to office B.

[26] *UNE Remand Order* at ¶¶ 346, 358, 365

concerning the number of offices with CLEC transport does not establish whether any individual third-party supplier's network provides significant coverage of the offices with special access demand.

Furthermore, few of the offices with CLEC transport offer more than a single CLEC alternative. Data provided with BellSouth's recent special access pricing flexibility petition showed that, in the cities where BellSouth sought pricing flexibility, 100 of the 237 wire centers with CLEC transport had only a single CLEC alternative.[27] Only 93 of the 237 wire centers with CLEC transport had three or more CLEC alternatives. In the *UNE Remand Order*, the Commission explicitly declined to attach any significance to the presence of a single CLEC's transport facilities.[28]

There is no reason to believe that the fraction of special access end users that is covered by the "footprint" of multiple efficiently-routed CLEC transport networks will expand significantly. A CLEC's decision to build out its network to an additional ILEC central office is driven by an analysis of potential revenues and costs. Costs generally depend on mileage (though to a lesser extent than current ILEC access rates would suggest). As a CLEC builds out its network beyond the largest ILEC end offices, the potential revenues from each new office are lower than for previous offices and, in many cases, the costs are higher because the distance between offices is greater. Fixed costs and sunk costs, including collocation costs, become more significant as equal or greater

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[27]BellSouth Petition for Pricing Flexibility for Special Access and Dedicated Transport Services, August 24, 2000, CCB/CPD File No. 00-20, Attachment 3.

[28]*UNE Remand Order* at ¶¶ 344-345.

sunk costs must be borne by a smaller volume of traffic. Many of these lower-density offices may never be viable candidates for CLEC network construction, even though, in the aggregate, these offices serve a significant fraction of the population of special access end users.

It would be economically inefficient for the Commission to adopt a rule that effectively required CLECs that seek to offer special access services to build their transport networks to vast numbers of lower-density ILEC offices solely to access unbundled loops. Even the ILECs have acknowledged that transport costs would be inflated because the number and location of ILEC central offices do not reflect efficient network technology. For example, earlier in the UNE remand proceeding, GTE stated that:

> As a result of technological limitations in the past and the evolution of technology, ILECs found it necessary to place a switch in each rate center when building their networks. Had fiber-optics, DLC technology and the advanced switching platforms of today been available when ILECs were initially constructing their networks, the *ILECs would have far fewer switches than they do today*.[29]

As GTE acknowledged, transport costs are inflated by the need to interconnect an excessively large number of central offices.[30] It would be economically inefficient for CLECs that seek to offer competing special access services to invest billions of dollars

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[29]GTE Reply Comments, CC Docket No. 96-98, June 10, 1999, Tab B, Reply Declaration of Francis J. Murphy at 5 (emphasis added). GTE acknowledged estimates that only 4,200 switches (or only 22 percent of the current number of total switches) would be required with current technology. *See UNE Remand Order* at ¶ 258 n.504.

[30]GTE Reply Comments, CC Docket No. 96-98, June 10, 1999, at 40. *See also* GTE Reply Comments, Tab B, at 7 (by reducing the number of switches from 24 to 6, Rochester Tel reduced its interoffice trunking requirements by 40 percent).

in building their own transport facilities to thousands of central offices whose size and location is a legacy of now-obsolete switch technology.

EELs provide a mechanism for CLECs to obtain access to ILEC networks at a higher level of aggregation, and thus overcome to some extent the barriers imposed by the inefficient ILEC network architecture. If a CLEC sought to offer service in an area with several lower-density wire centers, the CLEC could build transport to one of these wire centers and then use EELs to serve end users throughout the larger area – rather than building transport facilities to all of the low-density wire centers in order to access unbundled loops.[31] Because the "hub" wire center would then have relatively high traffic density, it would be more likely to support the efficient construction of CLEC transport.

EELs

Obviously, if requesting carriers are impaired in their ability to offer special access services in the absence of both unbundled loops and unbundled transport, they are equally impaired in the absence of EELs. If requesting carriers were given access to unbundled loops and transport, but required to combine these elements themselves, they would have to establish costly collocation sites in every ILEC central office and dispatch personnel to those facilities each time a combination had to be made or undone.

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[31] *UNE Remand Order* at ¶ 288 (The EEL "allows requesting carriers to aggregate loops at fewer collocation locations and increase their efficiencies by transporting aggregated loops over efficient high-capacity facilities . . . .")